



CS280 - 63/37 Sn/Pb SOLDER BALLS  
 CSG280 - Sn/Ag/Cu SOLDER BALLS

SYMBOL	MILLIMETERS		
	MIN.	NOM.	MAX.
A	$\approx$	$\approx$	1.20
A <sub>1</sub>	0.20	$\approx$	$\approx$
A <sub>2</sub>	0.55	$\approx$	$\approx$
D/E	16.00 BSC		
D <sub>1</sub> /E <sub>1</sub>	14.40 BSC		
e	0.80 BSC		
ø <sub>b</sub>	0.35	0.40	0.45
bbb	$\approx$	$\approx$	0.10
ccc	$\approx$	$\approx$	0.12
ddd	$\approx$	$\approx$	0.15
eee	$\approx$	$\approx$	0.08
M	19		

### NOTES:

- ALL DIMENSIONS AND TOLERANCES CONFORM TO ASME Y14.5M-1994
- SYMBOL "M" IS THE PIN MATRIX SIZE.
- $\Delta$  DIMENSION IS MEASURED AT THE MAXIMUM SOLDER BALL DIAMETER, PARALLEL TO PRIMARY DATUM C.
- CONFORMS TO JEDEC MO-216-BAL-1 (DEPOPULATED).

## 280-BALL LAMINATE CHIP SCALE BGA, 0.80MM PITCH (CS280/CSG280)